

PHENIX WEEKLY PLANNING





7/9/2009 Don Lynch



This Week 7/6 - 7/10

Start Date End Date

•	Remove interlock from Shield Wall (1 hr)	Done	Done
•	Purge Flammable gas from IR detectors	Done	Done
•	Install electric circuits to burn-in test stand		
	for AC and heaters & to storage racks for		
	humidity control	Done	Done
•	Work permits for Shutdown start & DC repair	Done	Done
•	HV warning lights for cosmic ray & dark current TS in factor		Done
•	Work permits for RPC3, MuTrigger/MuTr N&S	in progress	7/10
•	Fabricate RPC3 N base, pitch support, lifting	p. 0g. 000	,, _0
	fixtures and $\frac{1}{2}$ octant 7&8 vertical support	in progress	7/10
•	Disassemble and stow Wall & Base (3 -4 days)	in progress	7/9
•	Fabricate Base Locking/Installation fixture	in progress	7/10
•	Fabricate RPC3 N survey fixture	in progress	7/10
	Fabricate RPC3 adjustable $\frac{1}{2}$ octant cradle	in progress	7/10
	cleaning and testing of MuTracker HV	iii pi ogi oos	7710
	splitter boxes	in progress	7/10
•	DC FEM Troubleshooting/Repair	in progress	7/10
	Order Tilt Table Lifters	in progress	7/10
•	Order burn-in test cover and AC control	in progress	7/10
	Get list of RPC3N installation hardware	in progress	7710
	and place orders	in progress	7/10
	Fan Tray replacement evaluation and priority plan	in progress	7/10
	Remove ladder & dumb waiter from EC (1/2 day)	in progress 7/10	7/10
	Kemove iduder a damp warrer from Ec (1/2 day)	//10	1/10

Task





Next Week 7/13 - 7/17

	Task	Start	Date	End	Date
•	Receive RPC3 N lifting fixture parts at factory	7/13	7/	′13	
•	Fold up EC platforms (1/2 day)	7/13	7/	′17	
•	Test base RPC3 N locking/installation fixture	7/13	7/	′17	
•	Test base RPC3 N survey fixture	7/13	7/	′17	
•	Test RMC higher comm speed on EC	7/13	7/	′17	
•	Simulated RPC installation at RPC Factory				
	(practice/tests) commission all installation				
	components base, locking/install, survey, cradle	7/13	7/	′31	
•	Remove MuID collars	7/15	7/	′15	
•	Receive complete RPC3 N base, pitch support,				
	lifting fixtures & ½ octant 7&8 vertical support	7/15	7/	′15	
•	Test and commission RPC3N lifting fixtures at				
	factory with S. Kane/designee as witness	7/15	7/	′15	
•	Move MMS South	7/17	7/	′17	

Continuing Tasks currently underway

PH ENIX	Task	Start Date	End Date
TEC	 Order MuID cable management components PC1 East repair fixture: order raw materials, order off-the-shelf components 	in progress	8/1
C	& hardware, receive and inspect components	in progress	8/1
12H	 Prep RPC3 N racks for installation Review PHENIX RPC3 N lifting fixture design and run acceptance test in RPC Factory 	in progress	8/14
CA	(3 days) •Assemble HV, experimental gas and N2 gas	waiting for parts	7/15
Ĺ	distribution and install tent	in progress	7/15
S	 Finalize gap 5 N cable and pipe reorganization Field Fit ½ octant retaining arm/clamps design 	in progress	7/15
U P	to fit • Assemble Dummy $\frac{1}{2}$ octant and test with tilt	in progress	7/15
PO	table and Burn-in test stand field fit Order & receive parts for gap5 N cable	in progress	7/24
R	management	in progress	7/24
Ť	 Evaluate Gap 5 grout at Factory Design concept for Base locking/Installation 	in progress	7/24
2	fixture for RPC3N	in progress	7/24
ō	•Design RPC3 adjustable $\frac{1}{2}$ octant cradle	in progress	7/24
0	 Receive and test MuTrigger FEE's Receive MuTrigger FEE's cable and connectors, 	in progress	7/24
	prep and bundle for installation	in progress	7/24

PH**ÆNIX**

TECHZICAL

SUPPORT 2009

Continuing Tasks currently underway (cont'd)

	Task	Start Date	End Date
•	Install MuTrigger FEE Sta 2/3 cable Management and cable runs behind MMS Move PHENIX-North tunnel shielding, remove	in progress	7/28
•	PHENIX-North vapor barrier and crystal palace, repair/replace area lighting Move MuID piping, piping supports out of Gap 5	in progress	7/31
	to temporary store area	in progress	7/31
•	Move MuID cables and cable tray out of Gap 5 to temporary store area	in progress	7/31
	Plan and install 2 new PHENIX gas pad expansion pads	in progress	9/4
•	Spec, purchase, install and test instrumentation and monitoring, cables, etc.for rack room AC3 and new electronics water chiller Spec, purchase, install and test instrumentation and monitoring, cables, etc.for non-PHENIX	in progress	10/31
	fire alarm status panel	in progress	10/31
•	Spec, purchase, install and test power wiring for new DCM racks	in progress	10/31
•	Start Design supports for Beampipe upgrade	in progress	11/30
•	Design & Fabrication support for VTX	in progress	11/30
•	Design support for FVTX	in progress	11/30
•	Design support for FOCal	in progress	11/30
•	Fan Tray replacements (as time permits)	in progress	11/30





Detector Subsystems with no specific shutdown support requests

```
Aerogel
          BBC
         EMCal
    HBD (may change)
          MPC
          MuID
          RICH
RXNP (no work anticipated)
          TEC
          TOF
       TOF West
```



Expected IR Configuration During Shutdown '09

```
7/6 - 7/17 Run configuration EC and WC can be moved east/west ~3 ft

7/17-7/22 MMS moved south, CM in run position EC & WC can be moved east/west ~3 ft

7/22-7/28 MMS north, Run configuration WC can be moved east/west ~3 ft EC in AH

7/28-10/1 MMS south, CM in run position, EC in AH WC in west position (against wall), scaffolding in station 1 and station 2/3 south

9/25-11/10 MMS, CM & WC positions TBD, EC in AH

11/10-12/1 MMS & CM in run position, EC and WC can be moved east west ~3 ft
```

These dates are approximate and subject to change

Remainder of July Schedule

PH ENIX
FECIZHO
A L S
)
2 0 0 9

	Task	
•	Disconnect EC and Move to AH	
•	Open MMN hatch and O2 check atmosphere	
•	Install ladder/access platform and work	
	platforms for work above MuID steel (3 days	;)
•	Move MuID plumbing rack on pedestal away	
	From gap 5	
•	Move MMS North	
•	Install IR floor plates, 12 ton cart & manlift	
•	Move MuID collars to AH	
•	Remove 4 MMS lampshades (2-3 days)	
•	Reinstall ladder and dumb waiter on EC in AH	
	and fold down EC platforms (1 day)	
•	ID/label gap 5 N cables & pipes and move out	,
	of gap 5	
•	Troubleshoot MUTrigger FEE's in MMN	
•	Troubleshoot MUTr decaps in MMN	e e
•	Move MMS South	
•	Install Station 1 Scaffolding (3 days)	
•	Inspect Station 1 Scaffolding (1/2 day)	M
•	Install MuTrigger Station 1 S FEE cable	

Start	Date	End	Dat
7/20	7/2	2	
7/20	7/24		
7/20	7/24		
7/20	7/30		
7/22	7/22		
7/22	7/22		
7/23	7/23		
7/24	7/28		
7/24	7/31		
7/27	7/30)	
7/27	8/31		
7/27	8/31		
7/28	7/28		
7/28	7/30		
7/30	7/31		
7/30	7/31		

management

August Schedule

	_	riugus, contrata de la contrata del contrata de la contrata del contrata de la contrata del contrata de la contrata de la contrata de la contrata del contrata de la contrata del la				
PH [®] EI	NIX	Task	Start Date	End Date		
FECIZHUAL	•	Reconnect EC utilities for shutdown mode Survey tapped holes on MuID5 steel and survey	8/3	8/7		
C		east and west RPC3 N support bases (3 days)	8/3	8/14		
	•	Drill and tap MuID gap 5 steel top and north	8/3	8/14		
12	•	Install RPC3 N support base & grout (4 days)	8/3	8/14		
	•	Install Station 3 N pitch control (unistrut rails) on				
2		pedestal and east and west gap 5 north walls and	A.			
		attach to support bases (tall column)	8/3	8/14		
L	•	Install MMS station 2/3 scaffolding	8/3	8/14		
5	•	Install Station 1 FEE's & Electronics and connect cables	8/3	8/28		
U	•	MuTr decapacitations & MuTr FEE trouble-Shooting in	IX	·		
SUPPORF		MMS Sta 1&3	8/3	8/28		
P	•	MuTr Rack 2 troubleshooting	8/3	8/28		
0	•	Vendor install Ar dewar & vaporizer	8/3	8/28		
R	•	Install rails and fences on gas pad	8/3	8/28		
T	•	DCM rack electric prep	8/3	8/30		
2	•	MuTr HV and FEE test and evaluation as MuTrigger 1 LL3		3, 33		
Ō		& RPC's are installed	8/3	11/30		
0	•	Set up PHENIX "stage" for Summer Sunday Tour	8/5	8/7		
9	•	Tear down and remove PHENIX "stage" for Summer				
		Sunday Tour	8/10	8/11		
	_ ,					

PH**ENIX**

August Schedule

	Task	Start Date	End Date
•	Erect PC1 repair tool	8/12	8/14
•	First $\frac{1}{2}$ octant ready for installation	8/17	8/17
•	Disassemble DC/PC1 cables & piping	8/17	8/28
•	Install Station 1 MuTrigger FEE air & water		
	and test	8/17	9/11
•	Install new gap5 N cable & pipe supports,		
	cables and piping and leak test piping	8/17	9/30
•	Install RPC3 N $\frac{1}{2}$ Octants (16 days)	8/17	9/30
•	Final leak test new Ar dewar/vaporizer and	2	
	Closeout job	8/28	9/4
•	Move DC on EC to access PC1 east	8/31	9/4
•	Install Empties racks on gas pad	8/31	9/4
•	Install MuTrigger FEE station 2/3 FEE's &		
	Electronics & connect cables	8/31	9/25





PH ENIX

September Schedule

	Task	Start Date	End Date
•	Close MMN Hatch and closeout WP	9/1	9/1
•	Rack room re-organization	9/1	11/30
•	CM Power upgrade (as toime permits)	9/1	11/30
•	Labor Day Holiday - no work	9/7	9/7
•	Remove failed PC1 east module	9/8	9/11
•	Install spare PC1 east module	9/8	9/11
•	Install 2 RPC3 N racks (1/2 day)	9/8	9/18
•	Test PC1 spare and verify operation	9/14	9/17
•	Install MuTrigger FEE station 2/3 air &		
	water plumbing and test	9/14	10/9
•	Move DC on EC back to normal position	9/18	9/18
•	Reconnect cables and piping on DC and PC1 East	9/21	9/25
•	Remove station 1 south scaffolding	9/21	9/25
•	Install rack components in RPC3 N racks	9/21	9/30
•	Final verification tests on PC1 east repair	9/28	9/30

PH ENIX

October Schedule

	Task	Start Date	End Date
•	Disassemble and store PC1 east repair fixture	10/1	10/2
•	Attach cables to RPC3 N racks and to Detector $\frac{1}{2}$ octants	10/1	10/9
•	Install new PHENIX north tunnel thermal/vapor barrier replacing crystal palace (1 week)	10/1	10/30
•	DCM rack supply& Return plumbing	10/5	10/16
•	Remove MMS Sta 2/3 scaffolding	10/12	10/23
•	Commission RPC3 N racks and detectors	10/12	10/30
•	DCM rack internal plumbing	10/19	10/30
•	Reinstall MMS lampshades (2 days)	10/26	10/30

November Schedule

PH EN	x Task	Start	Date	End Date
T .	Install heaters and thermostat(s) for RPC3N			
Ė	thermal control		11/2	11/6
C	Reinstall PHENIX North tunnel shielding (3 days)	11/2	11/6
H	Cooldown for Run 10 Starts		11/7	11/7
7	Move MuID Collars to IR		11/7	11/7
I,	Disconnect electric & Fiber in EC		11/2	11/7
ICAL	Remove ladder & dumb waiter from EC & Fold up			
	EC platforms in AH (1 day)		11/9	11/10
	Veterans Day Holiday - no work		11/11	11/11
S	Remove IR Floor plates and move 12 ton cart to	AH	11/12	11/12
ַ טַ	Move EC to IR		11/12	11/13
PPO	Reconnect electric and fiber to EC		11/16	11/20
	Reinstall ladder & dumb waiter on EC & Fold			
R	down EC platforms in IR (1 day)		11/16	11/20
T	Pink sheets, white sheets, blue sheets		11/16	12/1
2	Move MMS north, Install MuID Collars		11/23	11/25
2	Assemble shield wall base and wall in AH		11/23	11/30
ŏ	Thanksgiving Holiday - no work		11/26	11/27
9	Roll in shield wall		11/30	11/30
•	Start Run 10, All shutdown activities completed		12/1	12/1









PH ENIX

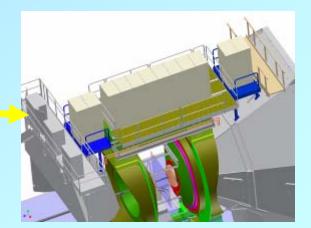
Other potential work this shutdown:

1. Remove the RPC prototype absorber



2. Prep Bridge for future upgrades

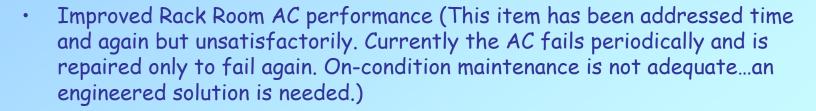






2009 Building Maintenance Issues

- Roof leaks in utility bathroom at northwest corner behind tech offices and over door between rack room and assembly hall.
- Heat wrap tape for trailer bathroom toilet drains to prevent freeze/clogging in winter.



- Icy conditions at mixing house north stairs
- Mixing House loose board?



PH ENIX

Safety, Security, etc.

The shutdown has started. We want to be a model of safety at PHENIX. Some things to remember.

- 1. Use appropriate PPE: gloves when handling materials, hard hats when cranes are in use or when working on lower levels of scaffolds with others working above.
- 2. During shutdown, PHENIX engineers and technicians, CAD engineers and technicians, bargaining unit workers, etc. may direct you to obey safety rules, barriers, etc. Willful violation of such requests may result in disciplinary actions from PHENIX or Lab management. When we work safely we are ultimately more efficient.



- 3. Remember to lock up at the end of each day, shifts are over. Techs will lock up before they leave, but others who work late must make sure they lock the doors behind them.
- 4. Read, understand and sign (original) work permits for tasks you are working on. PDF copies of all PHENIX 2009 shutdown work permits and referenced PHENIX controlled procedures are/will be available on the PHENIX engineering web site.





Where To Find PHENIX Engineering Info

Let's make this a successful shutdown!



Ŏ.

0



œ



ø.



Links for the weekly planning meeting slides, archives of past meeting slides, long term planning, pictures, videos and other technical info can be found on the PHENIX Engineering web site:

http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_SSint-page.htm 2/9/2009